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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,125

11/19/2003

Paul E. Jacobs

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QUALCOMM INCORPORATED
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EXAMINER

DINH, DUC Q

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

DELIVERY MODE

03/03/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/718,125	Applicant(s) JACOBS ET AL.	
	Examiner DUC Q. DINH	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,26,36,37 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,26,36-37, 48-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 8, 2010 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Jellicoe (U.S Patent No. 7,107,018).

In reference to claim 1, Jellicoe discloses apparatus comprising:

a housing comprising a display for presenting information, the housing having a housing bottom surface:

a keyboard assembly slidably deployable relative to the housing, the keyboard assembly comprising a first keyboard and a second keyboard, wherein the first keyboard and the second keyboard are slidably deployable relative to one another, wherein the first keyboard comprises a first key arrangement, (Fig. 2) on a first keyboard top surface opposite a first keyboard bottom surface, wherein the second keyboard (Fig. 3) comprises a second key arrangement a second keyboard top surface, wherein the second key arrangement is different from the first key arrangement, the keyboard assembly deployable relative to the housing in a first direction and a second, direction, wherein deployment in the first direction presents the first key arrangement and deployment in the second direction presents the second key arrangement;

a first connector slidably connecting the housing and the first keyboard, wherein the first connector comprises a first track slidably interconnected with a first carrier, wherein, a first one of the first track or the first carrier is disposed on the housing bottom surface, wherein a second one of the first track or the first career is disposed on the first keyboard top surface; (Fig. 2 shows the first keyboard 16 having the track that connects the first keyboard 16 with the bottom surface of the housing)

a second connector slidably connecting the first keyboard and second keyboard (see connection of keyboard 16 and keyboard 14 in Fig. 3), wherein the second connector comprising a second track slidably interconnected with the second carrier, wherein a first one of the second track or the second carrier is disposed on the first keyboard second surface, wherein the second one of the second track or the second

carrier is disposed on the second keyboard top surface. (see Figs. 2 and 3 for the connections between keyboard 14 and keyboard 16)

In reference to claim 3, Jellicoe discloses the first keyboard deployment direction presents a QWERTY key arrangement and the second keyboard deployment direction presents a phone style key arrangement. (See Figs. 2-3)

In reference to claim 4, Jellicoe discloses the device is operable as a PDA and a phone (col. 1, lines 29-35; col. 2, line 44-48).

In reference to claim 5, Jellicoe discloses the device is a wireless phone (col. 2, line 44-48)

In reference to claim 48, Jellicoe discloses the device comprises first end and second end, and a first side and an opposing second side, wherein the first connector is attached to the first keyboard top surface near the first end (see Fig. 2); wherein the first key arrangement is positioned on the first keyboard (see keyboard 16 in Fig. 2) top surface near the second end, wherein the second connector is attached to the second keyboard (14) top surface near the second side;

In reference to claim 49, Jellicoe discloses that:

wherein the device comprising first end and an opposing second end; and a first side and an opposing second side; (see Fig. 1)

wherein the first carrier (C-shaped guide 30) is fixed to the keyboard top surface near the first end, and wherein the first key arrangement is positioned on the first keyboard top surface near the second end (see Fig. 2);

wherein the first track is fixed to the housing bottom surface and extends in the first direction (see Fig. 2);

wherein the second carrier (C-shaped 32) is fixed to the second keyboard top surface near the first side, and wherein the second key arrangement is positioned on the second keyboard top surface near the second side; (see Fig. 3) and

wherein the second track is fixed to the first keyboard bottom surface and extends in the second direction;

4. Claims 7, 26 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jellicoe in view of Lenchik (U.S Patent No. 6,658,272)

In reference to claims 26, Jellicoe does not disclose the Hall effect sensor and magnets to determine the deployment of the keypad 14 and 16. However, the use of Hall effect sensor and magnet is used to determine the position of elements of a portable device is well-known in the art. In the same field of endeavor, Lenchik discloses the position sensor for detecting relative positions of the device to selecting operational modes of the device based on the detected relative positions comprises a magnet 1373 and a Hall Effect sensor 1377. The magnet 1373 is preferably affixed to an end of the connector element 903, and the Hall Effect sensor 1377 is affixed to or embedded in a fixed element 909. The magnet 1373 may be comprised of multiple magnetic north and south poles, and may be comprised of multiple magnets or magnetic poles of different strengths and orientations. The Hall Effect sensor 1377 generates an electrical signal when in a magnetic field. The corresponding position

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99sensor circuit board 1035 may use this electrical signal to determine a relative position.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the position sensor of Lenchik which includes magnets and Hall effect sensor in Jellicoe device for detecting the arrangement position of the keyboard 14 and 16 to determine the position of keypads 14 and 16 and activate the operational mode of the device based on the detected position.

In reference to claim 37, Lenchik discloses that the device notifies the user that a non-selected services is waiting to be received, i.e. generating a prompt to switch from one the operating to no-operating to the first operational mode and the second operational mode, the user may therefore reposition the device to self configured and display information is reoriented according to the operation. (col. 4, lines 53-64)

It would have been obvious for one of ordinary skill in the art at the time of the invention to learn the teaching of generating the prompt to switch from one operating mode to a non-operating mode as taught by Lenchik in the device of Jellicoe to notifies the user an incoming message waiting to be received when the device is used in the other operation mode.

In reference to claim 7, Lenchik discloses the touch screen display that is capable of reconfiguring and reorienting the input regions. (col. 4, lines 33-43).

In reference to claim 36, Lenchik discloses the flexible circuit material connecting between the first and second elements of the device in Figs. 9-10.

5. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jellicoe in view of Finke-Anlauff (U.S Patent No. 6,850,226)

Jellicoe does not disclose the display information rotated for viewing 90 degrees from the numerical keys, an operating application using the numerical keys during deployment of the first key arrangement. In same field of endeavor, Finke-Anlauff discloses a mobile device having keyboard deployable relative through a sliding connection which can presenting information on the display rotated for viewing 90 degrees from the numerical key based on a command of an operation application using the numerical keys. (col. 3, lines 32-40 and col. 4, lines 30-36 of Finke-Anlauff).

It would have been obvious for one of ordinary skill in the art at the time of the invention to utilize the method of reoriented the information 90 degrees in the device of Jellicoe as taught by Finke-Anlauff because it would yield a predictable result, i.e. viewing information from other applications in the numerical keys application for phone application, and provide the most advantageous view for a particular function for convenient access by the user.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571)272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AMR A. AWAD can be reached on (571)272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duc Q Dinh/
Primary Examiner, Art Unit 2629